



GLOBAL SKIN HEALTH

A SKIN PREBIOTIC CREAM FOR HELPING THE MICROBIOME RECOVERY AFTER SOAP CLEANSING

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Introduction: The disequilibrium of skin microbiota may contribute to facilitate skin disorders. Topical skin soaps as opposite than mild cleanser are still used products to clean the skin. They may alter the surface of the epidermis, cause skin discomfort and are known to be able to destabilize the microbiome.

Objective: it is important to propose a skin routine that will help skin quality recovery and feed skin microbiota to facilitate its recovery after alteration.

Materials and Methods: A group of 30 healthy volunteers aged 30-50y, was evaluated before and after soap cleansing then evaluated after the usage of either one or 15 days' successive applications of a skin care product. The formula of the specific cream includes Lactobacillus extracts and long and short saccharides. Total bacterial load was evaluated by QPCR (V1-V3 16S rRNA KAPA Biosystems kit with SYBER Green) and bacterial community using Next generation sequencing (Amplification V1-V3 on Illumina MiSeq platform). In addition, clinical evaluations and self-assessments were recorded.

Results: The wash with soap alter the total load bacteria and alpha / beta diversity of the skin bacterial communities and induce skin roughness/tightness after cleansing. One application of the specific skin cream helps to restore alpha diversity and decrease tightness, and very interestingly 15 days' skin care cream application allow the skin and bacteria community to better resist against aggression and to completely recover 6h post cleansing.

Conclusion: These findings show that the specific cream containing Lactobacillus extracts, long and short saccharides is able to improve skin quality and bring a quicker and complete recovery of skin bacteria altered by soap cleanser. This formula that "feeds" the skin microbiota and facilitates its recovery, in vivo, is considered as a prebiotic skin care formula and is very useful to keep skin and microbiome quality.

